IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

ICO THIEME

Serial No. (unknown)

Filed herewith

SYSTEM AND METHOD FOR DIGITALLY EDITING A COMPOSITE IMAGE e.g. A CARD WITH THE FACE OF A USER INSERTED THEREIN AND FOR SURVEILLANCE PURPOSES

PRELIMINARY AMENDMENT

Commissioner for Patents

Washington, D.C. 20231

Sir:

Prior to the first Official Action and calculation of the filing fee, please amend the above-identified application as follows:

IN THE CLAIMS:

Please amend Claim 9 as follows

9. (Amended) A method according to Claim 7, characterized in that, for providing the "first image" or virtual, valid "reference background" used in the following cropping two-image step e), in said working file Back0) said respective "taken background" (Fig. 5B) is stored, wherein

between the image held in the first working file (Back0) and the preceding images held in the other working files (from Back1 to Back5), the chromatic similitudes of the pixels arranged at the same locations are searched and, if for each pixel of the working file (Back0) a corresponding twin pixel is found in at least two images of the previous working files (from Back1 to Back 5), then said

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pixel in said first working file (Back0) is held as valid, otherwise said pixel being replaced (in Back0) by the latest twin pixel of the "reference background", i.e. of the image in the working file (Back1) (Figure 12).

Please amend Claim 24 as follows:

24. (Amended) A method according to Claim 18, characterized in that the function soft u) is performed for searching, for all the individual pixels of the "subject", the actual distance from the edge of said "subject" and, if said distance varies from 0 to 8 pixels, then to the pixel is applied a value defining the clearness of said pixel and, more specifically, with a strength which is reversely proportional to the distance of said edge, wherein said values are not immediately used, but interpreted at a subsequent time in a following merging step v) for merging the cropped "subject" (6) image and the preset view (4) image.

Please amend Claim 25 as follows:

25. (Amended) A method according to Claim 18, characterized in that, in continuing said method for making composite cards (1), at the end of said analysis/comparing and multiple-function final processing steps, in said merging step v) the surviving pixels of the image Fore, i.e. of said "subject" (6) are embedded by a physical replacement in the view (4) image, and that an harmonizing function w) for harmonizing the subject (6) edges with the adjoining pixels is moreover provided.

Please amend claim 27 as follows:

characterized in that after said "subject" (6) and "view" merging step v), an adding step x) for adding wordings or a caption (32) to the view (4) is optionally carried out, wherein said step x) adding said wordings (32) to said view (4) is analogous to said merging step v), and wherein, for defining the writing regions with respect to the non affected "background" regions, there is used the known "chroma-key" method, using, for example, as a discriminating color, the pure green.

Please amend Claim 29 as follows:

29. (Amended) A method according to Claim 24, for additionally making greeting cards, characterized in that as a "view" is introduced a view suitable for a greeting card, which has been prestored and can be selected by the user among a plurality of other prestored uses, wherein a caption or overlay can be added, wherein, at the end of the step soft u), on said screen a display showing the photo of the face of the user inserted into the preselected "view", as well as the overlay also preselected by the user are displayed.

Please amend Claim 30 as follows:

additionally making photo-cards and stickers, characterized in that the software operating module B, "Core.exe", saves an image in which the "subject" has been put on a "view" as a white, or other suitable color background, wherein the post-processing module F provides a form in which the printing format forming images are arranged, for example by providing 16 small images for said stickers or 4 or 6 larger images for said photo-cards, wherein, after forming the composite pattern composition, said composite pattern is

sent to said printer.

Please amend Claim 31 as follows:

(Amended) A method according to Claim 7 for making visiting cards, characterized in that, likewise to the method for making said greeting cards, a form for the layout preselected among a range of prestored layout is provided, wherein inside said layout there are arranged an image, which is the photo processed by the module B, "Core.exe", and a plurality of text cells representing the "vessels" provided for receiving the text keyed by the user, for example by using the virtual keypad on the touch screen (17), thereby, by touching one of the text fields, the keyed characters will fill in said field, wherein, to edit a further field, it said further field is simply touched on said screen, thereby addressing the input of said virtual keypad toward said other field, wherein, moreover, by pressing a confirmation field on the virtual keypad of the monitor (17), the layout will be duplicated into a series of copies, for example three copies, on another form holding the actual print size therein, and then said new form being sent to said printer.

Please amend Claim 32 as follows:

32. (Amended) A method according to Claim 7, for making composite cards or special products, characterized in that said method further comprises the step of sending said composite cards or special products to a receiving party through the internet, wherein the end bitmap is reduced to a size suitable for display on said screen and being converted into a JPG format, a form allowing to input data of the sending party, of the receiving party, as well as a short accompanying text, and then the assembly being integrated in a HTML codified page and sent onto the net by a modem and

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telephone, after having introduced into the casher the required money or amount for transmitting on internet, and as displayed on the screen.

Please amend Claim 37 as follows:

characterized in that into the TheMask.exe module is provided for the client the possibility to take decisions related to the "card" and "greetings bill" products as novel printed format, that is of choosing for the end product among three patterns, for example among 1) an end product having the traditional so called "live printing" format, 2) an end product with a frame shaped perimetrical edge, or 3) an end product with a frame shaped perimetrical edge and a caption at the bottom portion of the card, greetings bill or the like.

Please amend Claim 38 as follows:

38. (Amended) A method according to Claim 36, characterized in that into the TheMask.exe module is provided for the client the possibility as to the so-called "stickers" and "visiting bills or cards" to select if the photo pagination must be vertical (the commercial form) or horizontal.

Please amend Claim 40 as follows:

- 40. (Amended) A method of the type disclosed in Claim 36, characterized in that it is used in the surveillance and security field, is simplified as stated in the following and comprises the following steps
- A) a "sample image" is at first overshoot or "captured", for example at the safety system energizing moment,
- B) said "sample image" is stored in the system as a "reference background" (figure 44),

- C) under not-alarm conditions, i.e. in an intruder lacking condition, figure 44, the control monitor 43 (a single monitor being advantageously provided) of the video-camera/video-cameras, will provide the normal image taken through the environment, (figure 44), whereby with a cyclic frequency, for example of 3 seconds, the image supplied by the video-camera (figure 45) is automatically compared with the reference image (figure 44),
- D) during the analyzing operation, all the shared and accordingly like areas are eliminated from the image, and it is controlled if are present remaining agglomerated pixels in more or less homogeneous areas (figure 46) i.e. areas which may represent a moving intruder person or body, not pertaining to the surveilled environment,
- E) in affirmative case, i.e. if an intruder person or body is present, the background of the control monitor will preferably assume a contrasting color pattern, for example a red color, and on the monitor the areas different or extraneous from the reference image, for example the image of an intruder, will be stored, and
- F) simultaneously, the image is stored together with the event hour and its place, for example the room access door area, so that the surveilling operator can immediately display the image of the intruder.

Please amend Claim 42 as follows:

42. (Amended) Composite cards, greeting cards, photo-cards and stickers, visiting cards and the like, characterized in that they are made and printed by a systems and method according to claim 1.

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Attached hereto is a marked up version of the changes made to the claims by the current amendment. The attached page is captioned 'Version with markings to show changes made."

Respectfully submitted,
YOUNG & THOMPSON

Ву

Benoît Castel
Attorney for Applicant
Registration No. 35,041
745 South 23rd Street
Arlington, VA 22202
Telephone: 703/521-2297

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 9 has been amended as follows:

9. (Amended) A method according to Claims 7 and 8, Claim 7 characterized in that, for providing the "first image" or virtual, valid "reference background" used in the following cropping two-image step e), in said working file Back0) said respective "taken background" (Fig. 5B) is stored, wherein

between the image held in the first working file (Back0) and the preceding images held in the other working files (from Back1 to Back5), the chromatic similitudes of the pixels arranged at the same locations are searched and, if for each pixel of the working file (Back0) a corresponding twin pixel is found in at least two images of the previous working files (from Back1 to Back 5), then said pixel in said first working file (Back0) is held as valid, otherwise said pixel being replaced (in Back0) by the latest twin pixel of the "reference background", i.e. of the image in the working file (Back1) (Figure 12).

Claim 24 has been amended as follows:

24. (Amended) A method according to Claims 18 to 23, claim 18 characterized in that the function soft u) is performed for searching, for all the individual pixels of the "subject", the actual distance from the edge of said "subject" and, if said distance varies from 0 to 8 pixels, then to the pixel is applied a value defining the clearness of said pixel and, more specifically, with a strength which is reversely proportional to the distance of said edge,

wherein said values are not immediately used, but interpreted at a subsequent time in a following merging step v) for merging the cropped "subject" (6) image and the preset view (4) image.

Claim 25 has been amended as follows:

25. (Amended) A method according to Claims 18 to 24, Claim 18 characterized in that, in continuing said method for making composite cards (1), at the end of said analysis/comparing and multiple-function final processing steps, in said merging step v) the surviving pixels of the image Fore, i.e. of said "subject" (6) are embedded by a physical replacement in the view (4) image, and that an harmonizing function w) for harmonizing the subject (6) edges with the adjoining pixels is moreover provided.

Claim 27 has been amended as follows:

27. (Amended) A method according to Claim 7 and 24, Claim 7 characterized in that after said "subject" (6) and "view" merging step v), an adding step x) for adding wordings or a caption (32) to the view (4) is optionally carried out, wherein said step x) adding said wordings (32) to said view (4) is analogous to said merging step v), and wherein, for defining the writing regions with respect to the non affected "background" regions, there is used the known "chroma-key" method, using, for example, as a discriminating color, the pure green.

Claim 29 has been amended as follows:

29. (Amended) A method according to Claim 7 and one or more of Claims 8 to 24, Claim 24 for additionally

making greeting cards, characterized in that as a "view" is introduced a view suitable for a greeting card, which has been prestored and can be selected by the user among a plurality of other prestored uses, wherein a caption or overlay according to the step h) of Claims 7 and 27 can be added, wherein, at the end of the step soft u) of Claim 24, on said screen a display showing the photo of the face of the user inserted into the preselected "view", as well as the overlay also preselected by the user are displayed.

Claim 30 has been amended as follows:

30. (Amended) A method according to Claim 7 and one or more of Claims 9 to 24 for additionally making photocards and stickers, characterized in that the software operating module B, "Core.exe", saves an image in which the "subject" has been put on a "view" as a white, or other suitable color background, wherein the post-processing module F provides a form in which the printing format forming images are arranged, for example by providing 16 small images for said stickers or 4 or 6 larger images for said photo-cards, wherein, after forming the composite pattern composition, said composite pattern is sent to said printer.

Claim 31 has been amended as follows:

31. (Amended) A method according to Claim 7 and one or more of Claims 8 to 24 for making visiting cards, characterized in that, likewise to the method for making said greeting cards, a form for the layout preselected among a range of prestored layout is provided, wherein inside said layout there are arranged an image, which is the photo processed by the module B, "Core.exe", and a plurality of text cells representing the "vessels" provided for receiving the text keyed by the user, for example by using the virtual

keypad on the touch screen (17), thereby, by touching one of the text fields, the keyed characters will fill in said field, wherein, to edit a further field, it said further field is simply touched on said screen, thereby addressing the input of said virtual keypad toward said other field, wherein, moreover, by pressing a confirmation field on the virtual keypad of the monitor (17), the layout will be duplicated into a series of copies, for example three copies, on another form holding the actual print size therein, and then said new form being sent to said printer.

Claim 32 has been amended as follows:

of Claims 7 to 31, Claim 7 for making composite cards or special products, characterized in that said method further comprises the step of sending said composite cards or special products to a receiving party through the internet, wherein the end bitmap is reduced to a size suitable for display on said screen and being converted into a JPG format, a form allowing to input data of the sending party, of the receiving party, as well as a short accompanying text, and then the assembly being integrated in a HTML codified page and sent onto the net by a modem and telephone, after having introduced into the casher the required money or amount for transmitting on internet, and as displayed on the screen.

Claim 37 has been amended as follows:

37. (Amended) A method according to Claims 35 and 36, Claim 36 characterized in that into the TheMask.exe module is provided for the client the possibility to take decisions related to the "card" and "greetings bill" products as novel printed format, that is of choosing for the end product among three patterns, for example among 1)

an end product having the traditional so called "live printing" format, 2) an end product with a frame shaped perimetrical edge, or 3) an end product with a frame shaped perimetrical edge and a caption at the bottom portion of the card, greetings bill or the like.

Claim 38 has been amended as follows:

38. (Amended) A method according to Claims 35 and 36, Claim 36 characterized in that into the TheMask.exe module is provided for the client the possibility as to the so-called "stickers" and "visiting bills or cards" to select if the photo pagination must be vertical (the commercial form) or horizontal.

Claim 40 has been amended as follows:

- 40. (Amended) A method of the type disclosed in Claims 35 and 36, Claim 36 characterized in that it is used in the surveillance and security field, is simplified as stated in the following and comprises the following steps
- A) a "sample image" is at first overshoot or "captured", for example at the safety system energizing moment,
- B) said "sample image" is stored in the system as a "reference background" (figure 44),
- C) under not-alarm conditions, i.e. in an intruder lacking condition, figure 44, the control monitor 43 (a single monitor being advantageously provided) of the video-camera/video-cameras, will provide the normal image taken through the environment, (figure 44), whereby with a cyclic frequency, for example of 3 seconds, the image supplied by the video-camera (figure 45) is automatically compared with the reference image (figure 44),
- D) during the analyzing operation, all the shared and accordingly like areas are eliminated from the image, and it is controlled if are present remaining agglomerated pixels

in more or less homogeneous areas (figure 46) i.e. areas which may represent a moving intruder person or body, not pertaining to the surveilled environment,

- E) in affirmative case, i.e. if an intruder person or body is present, the background of the control monitor will preferably assume a contrasting color pattern, for example a red color, and on the monitor the areas different or extraneous from the reference image, for example the image of an intruder, will be stored, and
- F) simultaneously, the image is stored together with the event hour and its place, for example the room access door area, so that the surveilling operator can immediately display the image of the intruder.

Claim 42 has been amended as follows:

42. (Amended) Composite cards, greeting cards, photo-cards and stickers, visiting cards and the like, characterized in that they are made and printed by a systems and method according to one or more of the claims 1 to 38. Claim 1